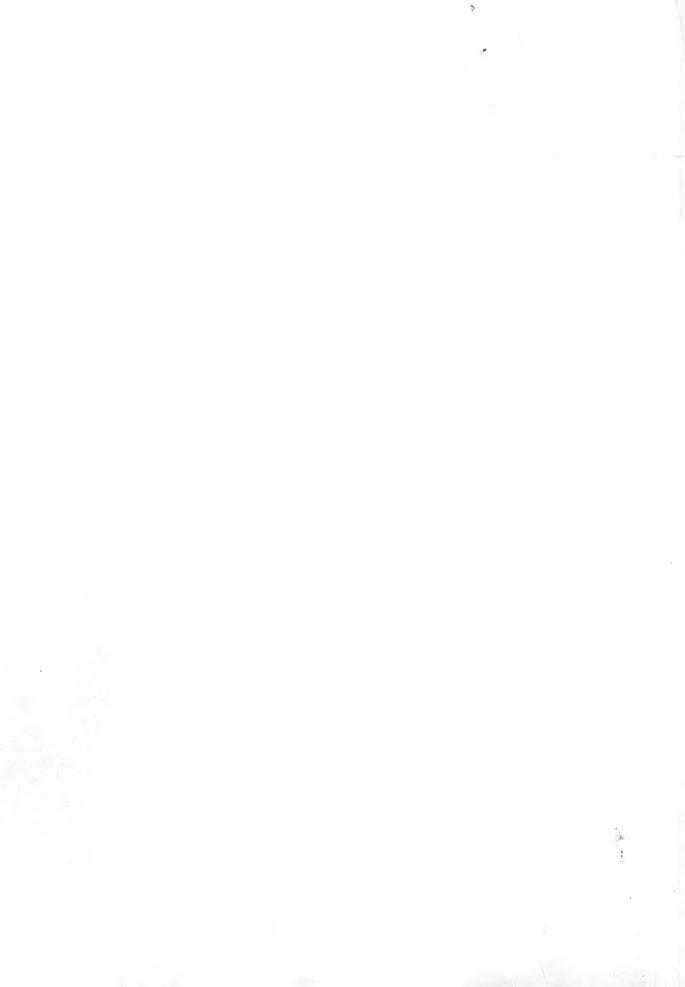
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Intermountain Forest and Range Experiment Station Ogden, UT 84401

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Forest Area and Timber Resource Statistics for State and Private Lands in New Mexico, 1980

Dorothy G Felt Velma J. Sterrett

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RESEARCH SUMMARY

The State of New Mexico contains 1,254,958 acres of commercial timberland in State and private ownership. These acres support more than 1.1 billion cubic feet of growing stock and 4.1 billion board feet of sawtimber. Additional information on total land area, commercial timberland area, timber inventory, and net annual growth and mortality based on Forest Survey standards is presented.

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Forest Area and Timber Resource Statistics for State and Private Lands in New Mexico, 1980

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INTRODUCTION

This resource bulletin presents the principal findings of the second Statewide inventory of State and private lands in New Mexico. The first inventory, conducted in 1962, did not sample counties intensively nor were the findings reported at a county or working circle level. Fieldwork for the second cycle, conducted by personnel from the New Mexico Division of State Forestry and the Forest Survey Research Work Unit at the Intermountain Forest and Range Experiment Station in Ogden, Utah, began in 1970 and was completed in 1980 (fig. 1). To

allow for meaningful comparisons the data for those working circles inventoried early in the cycle were updated to 1980. Thus, the information reported here will differ from totals obtained by adding the statistics contained in the individual working circle reports.

The primary objective of Forest Survey, a continuing nationwide undertaking conducted by the Forest Service, U.S. Department of Agriculture, is to provide an assessment of the renewable resource situation for forest and range lands of the Nation. Fundamental to the accomplishment of this objective are the periodic State-by-State resource inventories. Originally, Forest Survey was

NEW MEXICO 102 110 UNION SAN JUAN BIO ARRIBA taos COLFAX 1976 SANDOVAL MORA 36 36 HARDING 1970 Mc KINLEY OS ALAMOS SANTA DATE OF SAN MIGHEL 1974 1975 1975 OUAY VALENCIA # CHANALLIPE 35 35 TORRANCE CHRHA CATRON SOCORRO DE BACA DOSEVELT LINCOLN 779 34 1971 CHAVES) FA SIERRA OTERO GRANT 33 33 EDDY DONA ANA INDIVIDUAL COUNTY LUNA SURVEYS 32 VALENCIA COUNTY, AS SHOWN IN THIS REPORT, IS NOW DIVIDED INTO VALENCIA AND CIBOLA COUNTIES. 110 109 108 107 106 105 104 103 102

Figure 1.—Date of inventory by working circle, New Mexico.

authorized by the McSweeney-McNary Act of 1928. The current authorization is through the Renewable Resources Research Act of 1978.

The resource inventories for the Rocky Mountain States of Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming, western South Dakota, west Texas, and Oklahoma's Panhandle are administered by the Intermountain Forest and Range Experiment Station with headquarters in Ogden, Utah. These inventories provide information on the extent and condition of State and privately owned forest lands, volume of timber, and rates of timber growth and mortality. These data, when combined with similar information on Federal lands, provide a basis for the formulation of forest policies and programs and for the orderly development and use of the resources.

HIGHLIGHTS

Area

- The forest land area is 6,998,934 acres or 15 percent of the total State and private land area in New Mexico (fig. 2).
- Of the forest land, 1,254,958 acres, almost 18 percent, is classified as commercial timberland.
- Private ownership accounts for 1,161,972 acres, over
 92 percent of the commercial timberland.
- Ponderosa pine, Douglas-fir, fir-spruce, and aspen are the predominant forest types and occupy 91 percent of the commercial timberland (fig. 3).
- Over 71 percent of the commercial timberland is in the 20 to 49 cubic foot productivity class, and 92 percent of this is privately owned.

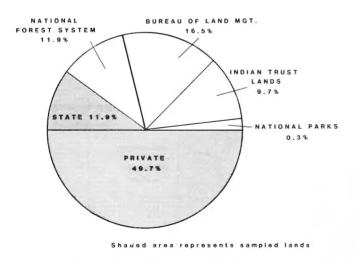


Figure 2.—Percent of total land area in New Mexico by ownership, 1980. (In this publication the private ownership category includes farmer-owned and other private ownerships, a small acreage of county and municipal ownerships and approximately 2.6 million acres of miscellaneous Federal ownership.)

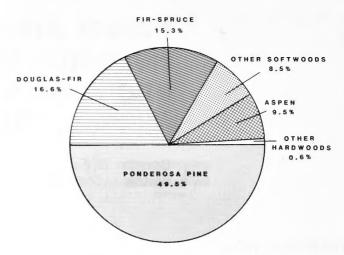


Figure 3.—Percent of commercial timberland in New Mexico by forest type, 1980.

Inventory

- Growing stock amounts to more than 1.1 billion cubic feet and sawtimber volume totals 4.1 billion board feet. In this report all reference to sawtimber volume is in International ¼-inch rule.
- Ponderosa pine is the predominate species on 50 percent of the commercial timberland (fig. 3).
- Rough, rotten, and salvable dead trees comprise over 101 million cubic feet, 8 percent of the total sound wood volume.
- More than two-thirds of the growing stock volume is in ponderosa pine, Engelmann spruce, and Douglasfir (fig. 4).
- Private owners control 93 percent of both the total growing stock and sawtimber volume.

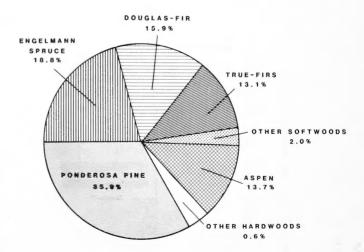


Figure 4.—Percent of sound live tree volume in New Mexico by species, 1980.

Growth and Mortality

- Net annual growth of growing stock totals 27.9 million cubic feet and 118.2 million board feet.
- About 94 percent of the total net growth is on private lands.
- The annual mortality of 1.9 million cubic feet offsets 6 percent of the gross annual growth.

HOW THE INVENTORY WAS CONDUCTED

The inventory was designed to provide reliable statistics primarily at the State and working circle levels. Procedures were:

- 1. Initial area estimates were based on the classification of 336,171 sample points systematically placed on the latest aerial photographs available. The sample points were summarized and grouped into strata for subsequent field sampling. The photo points, adjusted to meet known land areas, were used to compute area expansion factors for the field stratum means.
- 2. Land classification and estimates of timber characteristics and volume were based on observations and

measurements recorded at 1,709 ground sample locations of which 1,427 were forested. Sample trees were selected using a 10-point cluster, which includes fixed plots (1/300 acre) for trees less than 5.0 inches diameter at breast height (d.b.h.) and variable plots (40 basal area factor) for trees 5.0 inches d.b.h. or larger.

- 3. Equations prepared from detailed measurements collected on trees throughout the Southwest were used to compute the volume and defect of individual tally trees.
- 4. All photo and field data were sent to Ogden, Utah, for editing and were punched onto cards and stored for machine computing, sorting, and tabulation. Final estimates were based on statistical summaries of the data.

DATA RELIABILITY

Individual cells within tables should be used with caution. Some are based on very small sample sizes, and so result in high sampling errors. The standard error percents shown in tables 1 and 2 were calculated at the 67 percent confidence level.

Table 1.--Area of State and private forest land in New Mexico by type group, with percent standard error, 1980

Item	Softwood type	Hardwood type	All types	Percent standard error
		Acres		
Commercial timberland	1,127,304	127,654	1,254,958	±2.7
Productive reserved	438	790	1,228	
Other forest land: Unproductive reserved Unproductive nonreserved	37,906 5,120,828	4,885 579,129	42,791 5,699,957	

Table 2.--Net volume, net annual growth, and annual mortality of growing stock and sawtimber on State and private commercial timberland in New Mexico by softwoods and hardwoods, with percent standard error

Item	Softwoods	Hardwoods	All species	Percent standard error
		V	olume	
Net volume, 1980 Growing stock (M cubic feet) Sawtimber (M board feet ¹)	986,309 3,807,205	164,958 334,754	1,151,267 4,141,959	±6.1 ±4.5
Net annual growth, 1979 Growing stock (M cubic feet) Sawtimber (M board feet ¹)	23,473 105,039	4,476 13,204	27,949 118,243	±4.4 ±5.8
Annual mortality, 1979 Growing stock (M cubic feet) Sawtimber (M board feet ¹)	1,570 5,963	294 658	1,864 6,621	±19.6 ±21.5

¹International 1/4-inch rule.

TERMINOLOGY

The following section contains definitions that are relevant to the timber resource data presented in this resource bulletin.

Land

Area of dry land and land temporarily or partly covered by water, such as marshes, swamps, and river flood plains; streams, sloughs, estuaries, and canals less than 120 feet in width; and lakes, reservoirs, and ponds less than 1 acre in size.

Water

Streams, sloughs, estuaries, and canals more than 120 feet in width; and lakes, reservoirs, and ponds more than 1 acre in size.

Land Use Classes

Forest land.—Land at least 10.0 percent stocked by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use.

Commercial timberland.—Forest land producing or capable of producing crops of industrial wood and not withdrawn from timber utilization. (Areas qualifying have the capability of producing in excess of 20 cubic feet per acre per year of industrial wood in natural stands. Currently inaccessible and inoperable areas are included.)

Productive-reserved forest land.—Forest land sufficiently productive to qualify as commercial timberland, but withdrawn from timber utilization through statute, administrative designation, or exclusive use for Christmas tree production.

Other forest land.—Forest land incapable of producing 20 cubic feet per acre per year of industrial wood in natural stands because of adverse site conditions; includes both reserved and nonreserved forest land.

Nonforest land.—Land that has never supported forests and lands formerly forested where use for timber management is precluded by development for other uses.

Public Ownership Classes

National Forest lands.—Federal lands legally designated as National Forest or purchase units and other lands under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III lands.

Bureau of Land Management lands.—Federal lands administered by the Bureau of Land Management.

Miscellaneous Federal lands.—Federal lands other than (1) National Forest lands; (2) lands administered by the Bureau of Land Management; and (3) Indian trust lands.

Indian trust lands.—Indian lands held in trust by the Federal Government, for Indian tribal groups or for individual allotments.

State lands.—Lands owned by State or lands leased to the State for 50 years or more.

County and municipal lands.—Lands owned by counties and local public agencies or municipalities, or lands leased to these governmental units for 50 years or more.

Private Ownership Classes

Forest industry lands.—Lands owned by companies or by individuals operating wood-processing plants.

Farmer-owned lands.—Lands owned by farm operators. These exclude lands leased by farm operators from such nonfarm owners as railroad companies and States.

Other private lands.—Privately owned lands other than forest industry and farmer-owned lands.

Forest Type and Tree Species

Forest types.—A classification of forest land based upon the species forming a plurality of live-tree stocking.

Forest trees.—Woody plants having a well-developed stem and usually more than 12 feet in height at maturity.

Commercial species.—Tree species presently or prospectively suitable for industrial wood products.

Softwoods.—Monocotyledonous trees, usually evergreen having needles or scalelike leaves.

Hardwoods. — Dicotyledonous trees, usually broadleaved and deciduous.

Area Condition Classes

Stocking.—Stocking is an expression of the extent to which growing space is effectively utilized by present or potential growing stock trees of commercial species. "Percent of stocking" is synonymous with "percentage of growing space occupied" and means the ratio of actual stocking to full stocking for comparable sites and stands. Basal area is used as a basis for measuring stocking.

"Stocking percentages" express current area occupancy in relation to specified standards for full stocking based on number, size, and spacing of trees considered necessary to fully utilize the forest land.

Full utilization of the site is assumed to occur over a range of basal area. As an interim guide, 60 percent of normal yield table values has been used to establish the lower limit of this range, which represents full-site occupancy, and equals 100-percent stocking. The upper limit of full stocking has been set at 132 percent.

Class 10.—Areas fully stocked (100 to 132 percent) with desirable trees and not overstocked (133 percent or more)

Class 20.— Areas fully stocked with desirable trees, but overstocked with all live trees.

Class 30.—Areas medium to fully stocked (60 to 99 percent) with desirable trees and with less than 30 percent of the area controlled by other trees and/or inhibiting vegetation or surface conditions that will prevent occupancy by desirable trees.

Class 40.—Areas medium to fully stocked with desirable trees and with 30 percent or more of the area controlled by other trees and/or conditions that ordinarily prevent occupancy by desirable trees.

Class 50.—Areas poorly stocked (16.7 to 59 percent) with desirable trees, but fully stocked with growing stock trees.

Class 60.—Areas poorly stocked with desirable trees, but with medium to full stocking of growing stock trees.

Class 70.—Areas nonstocked (less than 16.7 percent) or poorly stocked with desirable trees, and poorly stocked with growing stock trees.

Class 80.—Low-risk old-growth stands.

Class 90. — High-risk old-growth stands.

Nonstocked.—Areas less than 16.7 percent stocked with growing stock trees.

Productivity

Productivity class.—A classification of forest land in terms of potential growth in cubic feet of fully stocked natural stands.

Stand-Size Classes

Sawtimber stands.—Stands at least 16.7 percent stocked with growing stock trees, with half or more of total stocking in sawtimber or poletimber trees, and with sawtimber stocking at least equal to poletimber stocking.

Poletimber stands.—Stands at least 16.7 percent stocked with growing stock trees in which half or more of this stocking is in poletimber and/or sawtimber trees, and with poletimber stocking exceeding that of sawtimber.

Sapling-seedling stands.—Stands at least 16.7 percent stocked with growing stock trees in which more than half of the stocking is saplings and/or seedlings.

Nonstocked land.—Commercial timberland less than 16.7 percent stocked with growing stock trees.

Class of Timber

Growing stock trees.—Live trees of commercial species qualifying as desirable or acceptable trees. (Excludes rough, rotten, and dead trees.)

Desirable trees.—Growing stock trees (1) having no serious defect in quality to limit present or prospective use for timber products; (2) of relatively high vigor; and (3) containing no pathogens that may result in death or serious deterioration before rotation age.

Acceptable trees.—Growing stock trees meeting specified standards of size and quality, but not qualifying as desirable trees.

Rough trees.—(1) Live trees that do not contain at least one 12-foot saw log or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, and/or do not meet Rocky Mountain regional specifications for freedom from defect primarily because of roughness or poor form; and (2) all live trees of noncommercial species.

Rotten trees.—Live trees that do not contain at least one 12-foot saw log or two noncontiguous saw logs, each 8 feet or longer, now or prospectively, and/or do not meet Rocky Mountain regional specifications for freedom from defect primarily because of rot; that is, when more than 50 percent of the cull volume (cubic-foot basis) in a tree is rotten.

Salvable dead trees.—Standing or down dead trees that are considered merchantable by Rocky Mountain regional standards.

Saw-log portion.—That part of the bole of sawtimber trees between the stump and the saw-log top. A 1-foot stump is used.

Upper-stem portion.—That part of the bole of saw-timber trees above the saw-log top to a minimum top diameter of 4.0 inches outside bark or to the point where the central stem breaks into limbs, whichever occurs first.

Tree-Size Classes

Seedlings.—Live trees less than 1.0 inch d.b.h. Saplings.—Trees 1.0 to 4.9 inches d.b.h.

Poletimber trees.—Trees at least 5.0 inches d.b.h., but smaller than sawtimber size.

Sawtimber trees.—Trees exceeding poletimber size. In the Intermountain States, the minimum d.b.h. for softwood sawtimber is 9.0 inches and for hardwoods 11.0 inches.

Volume

Cull volume.—Portions of a tree's volume that are not usable for industrial wood products because of rot, poor form, or other defect.

Net volume.—Gross volume less deductions for cull. Growing stock volume.—Net volume in cubic feet of live sawtimber trees and live poletimber trees from stump to a minimum 4.0-inch top (of central stem) outside bark. Net volume equals gross volume less deduction for rot and missing bole sections.

Sawtimber volume.—Net volume in board feet of sawtimber trees of commercial species. Net volume equals gross volume less deduction for rot, sweep, crook, and other defects that affect use for lumber.

Growth and Mortality

Net annual growth.—The increase in net growing stock or sawtimber volume of a specified size class for a specific year. (Components of net annual growth include the increment in net volume of trees at the beginning of the specific year surviving to its end, plus the net volume of trees reaching the size class during the year, minus the net volume of trees that died during the year, minus the net volume of trees that became rough or rotten trees during the year.)

Mortality.—Number or sound-wood volume of growing stock trees dying from natural causes during a specified period, usually annually.

FOREST SURVEY TABLES

Table 3.--Total land and water area in New Mexico by ownership class, 1980

Ownership class	Area
	Acres
Land: National Forest ¹ Bureau of Land Management National Park ² Indian trust lands State Private ³	9,230,765 12,836,240 246,800 7,507,267 9,223,939 38,609,357
Total land area	77,654,368
Census water	164,851
Total land and water ⁴	77,819,219

¹Includes National Grasslands administered by the Forest Service.

²Not included with miscellaneous Federal ownership, a category of private, for purposes of clarity.

³On this and all following tables, the private ownership category includes farmer-owned and other private ownerships, a small acreage of county and municipal ownership, and approximately 2.6 million acres of miscellaneous Federal ownership. Also includes the recent transfer of 100,000 acres of private land to the National Forest System (Valle Vidal-Carson National Forest).

⁴U.S. Bureau of the Census, land and water area of the United States. 1980.

Table 4.--Total land area of State and private ownership in New Mexico by major land class and ownership class, 1980

	0wnersh	T- 1	
Land class	State	Private	Total
		Acres	
Commercial timberland	92,986	1,161,972	1,254,958
Productive reserved forest land Other forest land:	688	540	1,228
Unproductive reserved Unproductive nonreserved	11,785 1,026,173	31,006 4,673,784	42,791 5,699,957
Total forest land	1,131,632	5,867,302	6,998,934
Nonforest land	8,092,307	32,742,055	40,834,362
Total land area	9,223,939	38,609,357	47,833,296

Table 5.--Area of State and private commercial timberland in New Mexico by forest type, stand-size class, and productivity class, 1980

Forest type and		Total			
stand-size class	120+	85-119	50-84	20-49	acres
			Acres -		
ouglas-fir:					
Sawtimber		5,177	39,094	87,217	131,488
Poletimber			10,051	37,529	47,580
Sapling and seedling Nonstocked			3,125	23,285 1,971	26,410 1,971
Total		5,177	52,270	150,002	207,449
10001		3,1//	JZ , Z/O	130,002	207,443
onderosa pine:					
Sawtimber		2,801	76,296	396,979	476,076
Poletimber			10,238 2,283	75,631	85,869 15,993
Sapling and seedling Nonstocked			2,203	13,710 43,210	43,210
Total		2,801	88,817	529,530	621,148
			00,01	023,000	322,213
outhwestern white pine:			670		
Sawtimber			670		670
Poletimber Sapling and seedling					
Nonstocked					
Total			670		670
pruce-subalpine fir: Sawtimber		5,575	55,947	40 020	102,361
Poletimber		5,575	10,327	40,839 9,644	19,971
Sapling and seedling		1,806	10,527	9,877	11,683
Nonstocked					
Total		7,381	66,274	60,360	134,015
		-			
imber pine:	2 642		1 155		2 700
Sawtimber Poletimber	2,643		1,155		3,798
Sapling and seedling					
Nonstocked					
Total	2,643		1,155		3,798
hite fir:					
Sawtimber		4,676	23,376	15,904	43,956
Poletimber		´	644		644
Sapling and seedling				3,510	3,510
Nonstocked			613	1,970	2,583
Total		4,676	24,633	21,384	50,693
					(con.

Table 5. (con.)

Forest type and		Productiv	ity class		Total
stand-size class	120+	85-119	50-84	20-49	acres
			Acres		
Engolmann chwuco:					
Engelmann spruce: Sawtimber		7,167	10,341	10,031	27,539
Poletimber		670	4,713	15,482	20,865
Sapling and seedling			7,217	1,929	9,146
Nonstocked				662	662
Total		7,837	22,271	28,104	58,212
Pinyon-juniper: Sawtimber			123	22,193	22,316
Poletimber				10,353	10,353
Sapling and seedling				9,396	9,396
Nonstocked				9,254	9,254
Total			123	51,196	51,319
Aspen: Sawtimber		2,824	40,401	13,119	56,344
Poletimber	611	5,509	8,878	8,515	23,513
Sapling and seedling		´	9,666	30,143	39,809
Nonstocked					
Total	611	8,333	58,945	51,777	119,666
Cottonwood:					
Sawtimber		1,631		2,982	4,613
Poletimber			1,882	729	2,611
Sapling and seedling Nonstocked				661	
Nonstocked				001	661
Total		1,631	1,882	4,372	7,885
Mixed hardwoods:					
Sawtimber				103	103
Poletimber					
Sapling and seedling					
Nonstocked					
Total				103	103
All types:					
Sawtimber	2,643	29,851	247,403	589,367	869,264
Poletimber	611	6,179	46,733	157,883	211,406
Sapling and seedling Nonstocked		1,806 	22,291 613	91,850 57,728	115,947 58,341
Total	3,254	37,836	317,040	896,828	1,254,958
Ισται	3,234	37,030	317,040	030,020	1,204,300

Table 6.--Area of State-owned commercial timberland in New Mexico by forest type, standsize class, and productivity class, 1980

Forest type and		Total			
stand-size class	120+	85-119	50-84	20-49	acres
			Acres		
ouglas-fir:					
Sawtimber		55	2,059	3,840	5,95
Poletimber Sapling and seedling			1,398 261	4,642 3,159	6,040 3,420
Nonstocked				235	23
Total		55	3,718	11,876	15,64
onderosa pine:					
Sawtimber		307	4,922	29,718	34,94
Poletimber			687	5,931	6,61
Sapling and seedling			19	1,058	1,07
Nonstocked		400 500		3,411	3,41
Total		307	5,628	40,118	46,05
outhwestern white pine:					
Sawtimber			6		
Poletimber				~-	-
Sapling and seedling Nonstocked					-
Total			6	_	
pruce-subalpine fir:		117	0.010	1 420	2.75
Sawtimber Poletimber		117	2,210 339	1,430 1,362	3,75° 1,70°
Sapling and seedling		91	339	659	75
Nonstocked					-
Total		208	2,549	3,451	6,20
imber pine: Sawtimber	25		42		6
Poletimber			44.		
Sapling and seedling					
Nonstocked					-
Total	25		42		6
hite fir: Sawtimber		65	1 200	1 627	3,08
Poletimber		03	1,390	1,627	3,00
Sapling and seedling				654	65
Nonstocked				234	23
Total		65	1,390	2,515	3,97
					(con

Table 6. (con.)

Forest type and		Productivi	ty class		Total
stand-size class	120+	85-119	50-84	20-49	acres
			- Acres		
Engelmann spruce:					
Sawtimber		1,295	1,311	2,259	4,865
Poletimber		5	140	2,661	2,806
Sapling and seedling			1,301	17	1,318
Nonstocked	-			7	7
Total		1,300	2,752	4,944	8,996
Pinyon-juniper: Sawtimber				854	854
Poletimber				276	276
Sapling and seedling				1,093	1,093
Nonstocked				263	263
Total				2,486	2,486
		· · · · · · · · · · · · · · · · · · ·			
Aspen:					
Sawtimber		92	2,560	427	3,079
Poletimber		196	1,251	411	1,858
Sapling and seedling Nonstocked			831	3,413	4,244
Total		288	4,642	4,251	9,181
Cottonwood: Sawtimber		110		100	000
Poletimber		110	94	123 37	233 131
Sapling and seedling			J+ 		131
Nonstocked				6	6
Total		110	94	166	370
Mixed hardwoods:					
Sawtimber					
Poletimber Sapling and seedling					
Nonstocked					
Total					
All types:					
Sawtimber	25	2,041	14,500	40,278	56,844
Poletimber		201	3,909	15,320	19,430
Sapling and seedling Nonstocked		91 	2,412	10,053 4,156	12,556 4,156
Total	25	2,333	20,821	69,807	92,986
		_,000	20,021	03,007	22,300

Table 7.--Area of privately owned commercial timberland in New Mexico by forest type, stand-size class, and productivity class, 1980

Forest type and		Total			
stand-size class	120+	85-119	50-84	20-49	acres
-			- Acres		
Douglas-fir:					
Sawtimber		5,122	37,035	83,377	125,53
Poletimber			8,653	32,887	41,54
Sapling and seedling			2,864	20,126	22,990
Nonstocked				1,736	1,730
Total		5,122	48,552	138,126	191,800
- andamaca nina					
onderosa pine: Sawtimber		2,494	71,374	367,261	441,129
Poletimber			9,551	69,700	79,25
Sapling and seedling		~ ~	2,264	12,652	14,91
Nonstocked				39,799	39,79
Total		2,494	83,189	489,412	575,09
Southwestern white pine:					
Sawtimber			664		66
Poletimber					
Sapling and seedling Nonstocked					
Total			664		66
-					
Spruce-subalpine fir:		E 450	F2 727	20 400	98,60
Sawtimber Poletimber		5,458	53,737 9,988	39,409 8,282	18,27
Sapling and seedling		1,715	9,900	9,218	10,93
Nonstocked				J,210	-
Total		7,173	63,725	56,909	127,80
=					
imber pine:					
Sawtimber	2,618		1,113		3,73
Poletimber					-
Sapling and seedling Nonstocked					
Total	2,618		1,113		3,73
<u>-</u>					
/hite fir: Sawtimber		4,611	21,986	14,277	40,87
Poletimber		4,011	644	14,2//	40,67
Sapling and seedling				2,856	2,85
Nonstocked			613	1,736	2,34
Total		4,611	23,243	18,869	46,72

Table 7 (con.)

Forest type and		Produc	ctivity class		Total
stand-size class	120+	85-119	50-84	20-49	acres
			Acres -		
Engelmann spruce:					
Sawtimber		5,872	9,030	7,772	22,674
Poletimber		665	4,573	12,821	18,059
Sapling and seedling Nonstocked			5,916	1,912 655	7,828 655
Total		6,537	19,519	23,160	49,216
		0,557	13,313	23,100	77,210
Pinyon-juniper:					
Sawtimber			123	21,339	21,462
Poletimber				10,077	10,077
Sapling and seedling				8,303	8,303
Nonstocked				8,991	8,991
Total =	~~		123	48,710	48,833
Aspen: Sawtimber		2,732	37,841	12,692	53,265
Poletimber	611	5,313	7,627	8,104	21,655
Sapling and seedling			8,835	26,730	35,565
Nonstocked _			***		
Total _	611	8,045	54,303	47,526	110,485
_					
Cottonwood:		1 501		2 050	4 200
Sawtimber Poletimber		1,521	1,788	2,859 692	4,380 2,480
Sapling and seedling			1,700	092	2,400
Nonstocked				655	655
Total		1,521	1,788	4,206	7,515
Mixed hardwoods:					
Sawtimber			~ ~	103	103
Poletimber Sapling and seedling					
Nonstocked					
Total _	one sale			103	103
Ξ					
All types:					_
Sawtimber	2,618	27,810	232,903	549,089	812,420
Poletimber	611	5,978	42,824	142,563	191,976
Sapling and seedling Nonstocked		1,715	19,879 613	81,797 53,572	103,391 54,185
_	2 000				
Total	3,229	35,503	296,219	827,021	1,161,972

Table 8.--Area of State and private commercial timberland in New Mexico by stand volume and ownership class, 1980

[T		Ownership class	ass
Stand Volume per acre:	State	Private	State and private
	1 1 1 1	Acres -	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Less than 1,500 board feet	37,250	425,555	462,805
1,500 to 4,999 board feet	44,033	521,686	565,719
5,000 to 9,999 board feet	10,933	180,535	191,468
10,000 board feet or more	770	34,196	34,966
All classes	986,26	1,161,972	1,254,958

International 1/4-inch rule.

Table 9.--Area of State and private commercial timberland in New Mexico by forest type and area condition class, 1980

rorest type	4				Area co	Area condition class	class					יייייירע ררע
as-fir	est type	10	20	30	40	50	09	70	80	06	Nonstocked	All Classes
ine 3,822 6,576 28,643 22,776 28,643 22,776 28,643 22,776 28,643 22,776 28,643 22,776 28,643 22,776 28,843 22,776 28,854 4,895 2,163 13,888 16,769 4,987 2,163 13,888 16,769 4,987 2,163 13,888 16,769 4,987 2,163 13,888 16,769 4,987	ı	1 1 1	1	1	1 t t	1 1 1	Acres	.es	1 1 1	r 1 1	1 1 2 2 4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
vestern white pine	ناد	-	4,042		11,758	15,277	38,133	46,714	16,357	15,397	1,971	207,449
e-subalpine fir 3,822 6,576 28,643 22,776	pine	:	;	8,809	6,998	35,965	1/9,998	252,682	32,934	60,552	43,210	621,148
fir fir nann spruce 4,664 4,895 nann spruce 19,696 2,466 nann spruce 19,696 2,466 nann spruce 19,698 2,468 nwood 19,612 48,893 2,163 13,888 16,769 4,987 nwood		3,822	6,576	28,643	22,776	1,820	25,132	27,880	15,561	1,805	; ;	6/0 134,015
fir ann spruce 4,664 4,895 ann spruce 19,696 2,466 and per 19,696 2,466 and per 19,612 48,893 Total softwoods 3,822 10,618 119,612 48,893 2,163 13,888 16,769 4,987 The standard of th	Je	1	;		ŧ	3,798	1	1	1	1	I	3,798
nann spruce 19,696 2,466 1-juniper 19,618 119,612 48,893 Total softwoods 2,163 13,888 16,769 4,987		i i	;	•	4,895	13,200	11,655	11,113	644	1,939	2,583	50,693
1-juniper	spruce	1	!		2,466	1,282	24,083	2,259	538	7,226	662	58,212
Total softwoods 3,822 10,618 119,612 48,893 2,163 13,888 16,769 4,987	nîper	1	1	:	-	:	11,085	21,040	1	9,940	9,254	51,319
2,163 13,888 16,769 4,987 hardwoods		3,822	10,618	119,612	48,893	71,342	290,086	362,358	66,034	96,859	57,680	1,127,304
hardwoods		.163	13,888		4.987	22,325	33,629	19,512	8	6,393	8	119,666
woods <u>2,163 13,888 16,769 4,987</u>		1	1		1			6,815	1	409	661	7,885
2,163 13,888 16,769 4,987	spoomp	1	1		1	1		103	1	1	1	103
		2,163	13,888		4,987	22,325	33,629	26,430		6,802	661	127,654
All types 5,985 24,506 136,381 53,880 9		3,985	24,506	136,381	53,880	93,667	323,715	388,788	66,034	103,661	58,341	1,254,958

(con.)

Table 10.--Area of State and private productive reserved and other forest land in New Mexico by land class, ownership class, and forest type, 1980 942,063 4,217,109 7,017 30,889 249 438 37,906 934,797 4,186,031 5,120,828 softwoods 5,159,172 Total softwoods 1,611 5,769 93,116 810,217 94,767 815,986 40 40 7,380 910,753 903,333 Mixed 5,402 831,702 3,266,355 837,137 33 33 1 30,522 4,128,612 4,098,057 juniper Pinyon-Engelmann 287 287 spruce 4,625 1 1 4,625 White fir 665 665 9 1 1 į l i 1 671 671 Forest type - Acres -Sprucefir S 2 | | 1 1 1 2 2 271 3,819 271 3,819 Limber 4,090 4,090 1 | | pine Subalpine 335 9,129 335 9,129 ŀ į 9,464 9,464 Bristlecone pine 1 1 1 1 104 104 I 104 104 Ponderosa 8,307 8,469 158 189 4 4 87,108 86,757 347 pine Douglas-773 12,954 786 12,954 13 I 1 1 13,740 1 13,727 Unproductive nonreserved: Productive reserved area: Unproductive reserved: Other forest land area: Total acres Land class Total all areas: Total Total Total State Private Private Private Private State State

Table 10 (con.)

			Fores	Forest type		
Land class	Oak	Aspen	Cottonwood	Mixed hardwoods	Total hardwoods	All types
	1 1 1 1	1 1 1 1 1 1	1 1 1	- Acres	1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Productive reserved area: State Private	1 1	351	1 1	439	439 351	688 540
Total	B E	351	!	439	790	1,228
Other forest land area: Unproductive reserved: State Private	1,734	; ;	; ;	3,034	4,768	11,785 31,006
Total	1,734	B (1)		3,151	4,885	42,791
Unproductive nonreserved: State Private	: :	4,197 29,538	385 7,346	86,794 450,869	91,376	1,026,173
Total	i 1	33,735	7,731	537,663	579,129	5,699,957
Total all areas: State Private	1,734	4,197 29,889	385	90,267 450,986	96,583 488,221	1,038,646
Total acres	1,734	34,086	7,731	541,253	584,804	5,743,976

Table 11.--Number of growing stock trees on State and private commercial timberland in New Mexico by species and diameter class, 1980

					Di	Diameter class (inches at breast height)	lass (i	nches a	t breas	t heigh	t)					
Species	1.0-2.9	3.0-	5.0-	7.0-	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0-22.9	23.0-24.9	25.0-	27.0-28.9	29.0+	A11 classes
	1	1 1 1	1 1	1 1	1 1 1	1 1 1	Thousa	Thousand trees	1 1 1 5	1 8 1	1 1	t t	! ! !	1 1 1	1	1
Douglas-fir Ponderosa pine	21,618 20,867	12,781 25,385	8,275	6,183	3,975	2,103	1,416	586 1,922	418	177 513	172 334	97	57	23	48 53	57,929 105,559
Southwestern	204	106	124	56	30	18	24	14	10	7	~	ł		-	(1)	792
Limber pine	1,713	1,556	703	524	246	155	35	50	31	19	^	4		1 1	`	5,044
Subalpine fir	11,552	7,813	4,532	1,668	1,173	622	276	123	91	39	27	∞	2	m	2	27,931
White fir	27,325	7,427	3,887	2,642	1,673	1,243	622	361	257	66	78	38	30	13	25	45,720
Engelmann spruce	20,154	18,908	8,753	6,072	5,035	2,435	1,265	738	361	112	91	47	24	19	∞	64,022
Pinyon/juniper	3,216	909,9	2,771	1,639	382	220	106	102	28	-	3	-	4	1	!	15,077
Total softwoods	106,649	80,582	48,350	34,830	21,862	13,331	7,653	3,896	2,241	996	715	401	169	66	136	321,880
					i											
Aspen Cottonwood	26,270	22,402	10,1	6,666	3,147	1,346	738	308	102 27	24	8	7	4	1	i	71,120
Other hardwoods	153	260	33	113	19	1	2	1	1	m	m	1	I I	1	1	586
Total hardwoods	26,483	23,016	10,241	7,074	3,272	1,353	740	341	129	33	18	10	2			72,717
All species	133,132	133,132 103,598 58,591	58,591	41,904	25,134	14,684	8,393	4,237	2,370	666	733	411	174	100	137	394,597

less than 500 trees.

Table 12.--Number of cull and salvable dead trees on State and private commercial timberland in New Mexico by ownership class, and softwoods and hard-woods, 1980

Ownership class and		Cull trees		Salvable
species group	Sound	Rotten	Total	dead trees
	1 1 1 1	Thousand trees	ld trees	1 1 1 1 1
State:				
Softwoods Hardwoods	6,729 901	145 374	6,874	399 156
ŀ	1			L
lotal	7,630	518	8,149	222
Private:				
Softwoods	54,626	2,278	56,904	3,764
Hardwoods	9,045	7,129	10,1/4	1,001
Total	63,671	9,407	73,078	5,415
State and private:				
Softwoods Hardwoods	61,355 9,946	2,423 7,503	63,778 17,449	4,163 1,807
Total	71,301	9,926	81,227	5,970

Table 13.--Net volume of growing stock on State and private commercial timberland in New Mexico by ownership class, forest type, and stand-size class, 1980

0 11 7	- , .		Stand	-size class		
Ownership class	Forest type	Sawtimber	Poletimber	Sapling/seedling	Nonstocked	All classes
				Thousand cubic	feet	
State:						
	Douglas-fir Ponderosa pine	6,177 26,159	3,502 3,385	1,022 106	46 607	10,747 30,257
	Southwestern white pine	6	3,305			50,257
	Spruce-subalpine fir	7,113	1,822	233		9,168
	Limber pine	134				134
	White fir	3,322	2 407	191	50	3,563
	Engelmann spruce Pinyon-juniper	6,491 208	3,487 64	959 69	(¹) 13	10,937 354
	Aspen	4,059	4,638	958	13	9,655
	Cottonwood	289	101		2	392
	Mixed hardwoods					
	All types	53,958	16,999	3,538	718	75,213
Private:	Douglas-fir	175,938	31,558	7,652	343	215,491
	Ponderosa pine	332,085	40,658	2,708	6,609	382,060
	Southwestern white pine	735				735
	Spruce-subalpine fir	162,138	20,829	3,161		186,128
	Limber pine	8,549				8,549
	White fir	53,021	526	835	624	55,006
	Engelmann spruce	35,224 6,119	22,831 2,417	5,313 741	58 452	63,426
	Pinyon-juniper Aspen	97,834	40,189	9,612	452	9,729 147,635
	Cottonwood	5,165	1,921	7,012	189	7,275
	Mixed hardwoods	20				20
	All types	876,828	160,929	30,022	8,275	1,076,054
Chata and mutuata.						
State and private:	Douglas-fir	182,115	35,060	8,674	389	226,238
	Ponderosa pine	358,244	44,043	2,814	7,216	412,317
	Southwestern white pine	741				741
	Spruce-subalpine fir	169,251	22,651	3,394		195,296
	Limber pine	8,683		1 000	674	8,683
	White fir	56,343	526 26 319	1,026 6,272	674 58	58,569
	Engelmann spruce Pinyon-juniper	41,715 6,327	26,318 2,481	810	58 465	74,363 10,083
	Aspen	101,893	44,827	10,570	405	157,290
	Cottonwood	5,454	2,022		191	7,667
	Mixed hardwoods	20				20
	All types	930,786	177,928	33,560	8,993	1,151,267

 $^{^{1}\}text{Less}$ than 0.5 thousand cubic feet.

Table 14.--Net volume of sawtimber on State and private commercial timberland in New Mexico by ownership class, forest type, and stand-size class, 1980

			Stand-si	ze class		422 2
Ownership class	Forest type	Sawtimber	Poletimber	Sapling/seedling	Nonstocked	All classes
			T	housand board feet ¹		
State:	Douglas-fir	23,990	6,475	2,796	203	33,464
	Ponderosa pine	108,634	8,377	389	3,050	120,450
	Southwestern white pine	27				27
	Spruce-subalpine fir	28,120	2,085	879		31,084
	Limber pine White fir	414 12,917		528	215	414 13,660
	Engelmann spruce	24,773	7,505	3,388	3	35,669
	Pinyon-juniper	762	253	169	65	1,249
	Aspen	13,381	4,948	1,672		20,001
	Cottonwood	1,380	34		10	1,424
	Mixed hardwoods		Alfa Code			
	All types	214,398	29,677	9,821	3,546	257,442
Private:						
	Douglas-fir	735,383	61,208	24,563	1,500	822,654
	Ponderosa pine	1,350,213	88,736	10,237	33,552	1,482,738
	Southwestern white pine	3,279				3,279
	Spruce-subalpine fir	622,863	30,385	11,129	wi en	664,377
	Limber pine White fir	20,853 192,617	1,012	2,305	2,671	20,853 198,605
	Engelmann spruce	141,217	47,470	18,110	304	207,10
	Pinyon-juniper	21,009	9,923	2,582	2,305	35,819
	Aspen	342,356	55,813	24,044	-,	422,213
	Cottonwood	25,142	642		1,020	26,804
	Mixed hardwoods	74				74
	All types	3,455,006	295,189	92,970	41,352	3,884,517
State and private:						
	Douglas-fir	759,373	67,683	27,359	1,703	856,118
	Ponderosa pine	1,458,847	97,113	10,626	36,602	1,603,188
	Southwestern white pine	3,306				3,306
	Spruce-subalpine fir	650,983	32,470	12,008		695,461
	Limber pine White fir	21,267 205,534	1,012	2,833	2,886	21,267 212,265
	Engelmann spruce	165,990	54,975	2,633	307	242,770
	Pinyon-juniper	21,771	10,176	2,751	2,370	37,068
	Aspen	355,737	60,761	25,716		442,214
	Cottonwood	26,522	676		1,030	28,228
	Mixed hardwoods	74				74
	All types	3,669,404	324,866	102,791	44,898	4,141,959

¹International 1/4-inch rule.

Table 15.--Net volume of growing stock on State and private commercial timberland in New Mexico by species and diameter class, 1980

					Diameter	er class	class (inches		at breast height)	t)				
Species	5.0-	7.0-	9.0-	11.0-	13.0-	15.0-	17.0-	19.0-	21.0-	23.0-24.9	25.0-	27.0-	29.0+	All
	1	1 1	1		1 1 1	1	Thousand	cubic feet	eet	1 1	1 1	1 1	1 1 1	1 1 1
Douglas-fir Ponderosa pine	12,799 22,661	23,619 52,723	28,632 59,202	26,292 69,359	24,684 62,843	15,238 43,993	13,127 33,283	8,086	9,482 17,888	6,822	4,5164,198	2,2463,683	7,608	183,151 413,204
white pine	315	262	252	251	498	435	363	289	135	1	80	63	36	2,979
Limber pine	1,476	1,972	1,831	1,764	781	1,083	996	712	268	191	70	1	ł	11,114
Subalpine fir	8,581	8,256	11,592	669,6	6,115	3,689	3,161	1,904	1,487	602	273	229	253	55,841
White fir	7,106	12,768	13,283	15,546	11,251	9,167	7,840	4,234	4,138	2,548	2,266	1,268	3,814	95,229
Engelmann spruce	16,994	29,564	45,669	36,528	28,189	23,276	14,425	6,083	6,054	3,709	2,201	1,968	1,318	215,978
ingold July per	1910	07067	C+06 T	2000	T 2000	10161	107							0,00
Total softwoods	71,339	131,684	161,810	160,397	135,419	98,015	73,419	43,362	39,531	27,595	13,658	9,457	20,623	986,309
Aspen Cottonwood	23,808	1,283	35,020 974	23,203	17,772	9,637 1,058	4, 287 1,223	1,227	348 444	166 382	53 293	42	151	157,985 6,401
OCHET HAT GWOODS	07	040	113	!	3/	8	1	67	+7	1		1	8	7/6
Total hardwoods	24,109	44,090	36,113	23,273	17,809	10,695	5,510	1,456	816	548	346	42	151	164,958
		ŀ												
All species	95,448		175,774 197,923	183,670	153,228 108,710	108,710	78,929	44,818	40,347	28,143	14,004	9,499	20,774	1,151,267

Table 16.--Net volume of sawtimber on State and private commercial timberland in New Mexico by species and diameter class, 1980

				Dian	Diameter class (inches at breast height	s (inches	at breas	t height)				
Species	9.0-	11.0-	13.0- 14.9	15.0- 16.9	17.0- 18.9	19.0- 20.9	21.0-	23.0-24.9	25.0- 26.9	27.0- 28.9	29.0+	All
	1 1	1		snoul	Thousand board feet, International 1/4-inch rule	feet, In	ternation	al 1/4-in	ch rule .	1	1	1 1 1 1
Douglas-fir Ponderosa pine	101,351 188,966	127,886 309,241	132,990 317,759	85,593 241,143	77,270 190,094	48,959 128,893	57,957 103,407	41,052 82,040	27,179 24,882	13,552 21,848	45,926 45,722	759,715 1,653,995
white pine	865	1,092	2,368	2,197	1,876	1,525	727	1 0	455	363	214	11,682
Limber pine Subalpine fir	7,568	7,5/1 48,366	4,262	5,916	5,058 16,540	3,945 9,946	1,448 7,816	1,0/2 3,198	403	1,245	1,401	37,243
White fir Engelmann spruce	47,239	67,810 182,837	51,297 147,781	42,187	35,239 76,050	18,383 31,976	17,109 31,872	10,521 19,659	9,884	5,134 10,616	15,487 7,176	320,290
Pinyon/juniper	4,432	3,434	3,546	3,465	735	2 8	222	1	153	8 8	1	15,987
Total softwoods	574,738	748,237	691,896	522,893	402,862	243,627	220,558	157,542	76,168	52,758	115,926	3,807,205
Aspen Cottonwood Other hardwoods	×××× ×××× ××××	124,823	100,669	55,180 6,048	23,696 6,841	6,819 1,013 129	1,660 2,054 98	886 1,684	286	197	702	314,019 20,302 433
Total hardwoods	XXXXX	125,158	100,875	61,228	30,537	7,961	3,812	2,570	1,714	197	702	334,754
All species	574,738	873,395	792,771	584,121	433,399	251,588	224,370	160,112 77,882	77,882	52,955	116,628	4,141,959

Table 17.--Net volume of growing stock and sawtimber on State and private commercial timberland in New Mexico by ownership class and species, 1980

						Spe	Species							
Ownership class	Douglas-fir Ponderosa pine	Ponderosa	Southwestern white pine	Limber pine	Subalpine fir	White	Engelmann spruce	Pinyon/ juniper	Total softwoods	Aspen	Cotton- wood	Other hardwoods	Total hardwoods	All species
	1 1 1 1 1	t t t		1		Thc	GROWING STOCK - Thousand cubic feet	rock ic feet -	1 1	1 2 8	1	1 1 1 1	1 1 1 1 1	1 1
State Private	9,192 173,959	30,052 383,152	16 2,963	691 10,423	3,664 52,177	5,788	14,684	620 8,193	64,707 921,602	10,187	282 6,119	37 535	10,506 154,452	75,213
Total	183,151	413,204	2,979	11,114	55,841	95,229	215,978	8,813	986,309	986,309 157,985	6,401	572	164,958	1,151,267
	1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	Thousan	id board fe	SAWTIMBER eet, Internat	SER national 1,	SAWTIMBER - Thousand board feet, International 1/4-inch rule	1 1 1	1 1	1	1 1 1 1 1 1 1 1	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
State Private	32,723 726,992	1,531,894	68	1,921	11,890	18,698	54,622 766,158	1,044	1,044 243,067 14,943 3,564,138	13,503 300,516	825 19,477	47	14,375 320,379	257,442 3,884,517
Total	759,715	759,715 1,653,995	11,682	37,243	187,513	320,290	820,780	15,987	320,290 820,780 15,987 3,807,205 314,019 20,302	314,019	20,302	433	334,754	4,141,959

Table 18.--Net volume of timber on State and private commercial timberland in New Mexico by class of timber, and softwoods and hardwoods, 1980

Class of timber	Softwoods	Hardwoods	All classes
	1 1 1 1	Thousand cubic feet	feet
Sawtimber trees: Saw-log portion Upper-stem portion	725,290 57,996	57,205 3,441	782,495 61,437
Total	783,286	60,646	843,932
Poletimber trees	203,023	104,312	307,335
All growing stock trees	986,309	164,958	1,151,267
Sound cull trees	40,974	5,343	46,317
kotten cull trees Salvable dead trees	8,899	14,320	23,219
All timber	1,060,797	191,937	1,252,734

Table 19.--Net volume of growing stock on State and private commercial timberland in New Mexico by forest type and species, 1980

					Species				
Forest type	Douglas-fir	Ponderosa pine	Southwestern white pine	Limber fir	Subalpine fir	White fir	Engelmann spruce	Pinyon/ juniper	Total softwoods
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1	1 1 1 1	Thous	- Thousand cubic feet	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1		1 1
Douglas-fir	128,064	26,803	1,958	5,650	580	43,313	5,045	099	212,073
Ponderosa pine	29,375	369,581	88	1,205	89	4,718	614	4,657	410,306
Southwestern white pine	294	;	415	;	1	32	1	t	741
Spruce-subalpine fir	3,907	;	1	504	41,986	613	136,914	1	183,924
Limber pine	1,623	310	1	2,200	405	655	:	;	5,193
White fir	6,016	4,781	190	473	1,396	34,826	631	1	48,313
Engelmann spruce	5,131	782	254	310	3,126	3,689	50,492	;	63,784
Pinvon-juniper	837	5,753	1	;	;	:	;	3,493	10,083
Aspen	7,904	2,663	74	772	8,280	7,383	22,056	.	49,133
Cottonwood	1	2,513		1	1	:	226	1	2,739
Mixed hardwoods	8 9	18		1	•		:	2	20
All types	183,151	413,204	2,979	11,114	55,841	95,229	215,978	8,813	986,309

Table 19 (con.)

		Sp	Species		
Forest type	Aspen	Cotton- wood	Other hardwoods	Total hardwoods	All species
	1 1 1	1 1	Thousand cubic feet	ic feet	1 1 1 1 1
Jouglas-fir	14,123	;	42	14,165	226,238
Ponderosa pine	992	489	530	2,011	412,317
Southwestern white pine	;	;	1	1	741
Spruce-subalpine fir	11,179	193	į	11,372	195,296
imber pine	3,490	;	;	3,490	8,683
White fir	10,256	1	1	10,256	58,569
Engelmann spruce	10,579	;	i	10,579	74,363
inyon-juniper	;	;	;	1	10,083
Aspen	107,366	791	ł	108,157	157,290
Sottonwood	-	4,928	;	4,928	7,667
Mixed hardwoods	1	1		•	20
All types	157,985	6,401	572	164,958	1,151,267

Table 20.--Net volume of sawtimber on State and private commercial timberland in New Mexico by forest type and species, 1980

				Species	Si				
Forest type	Douglas-fir	Ponderosa pine	Southwestern white pine	Limber pine	Subalpine fir	White fir	Engelmann spruce	Pinyon/ juniper	Total softwoods
	1 1 1 1 1	1 1 1 1 1 1 1 1 1	Thousand	board feet,	Thousand board feet, International 1/4-inch rule	1/4-inch rul	1 1 1	1 1	1
Douglas-fir	540,112	110,718	7,627	20,675	952	128,882	19,661	1,751	830,378
Ponderosa pine	105,259	1,466,978	447	2,840	1	14,134	2,230	8,059	1,599,947
Southwestern white pine	1,505	1	1,652	!	i	149	1	1 1	3,306
Spruce-subalpine fir	16,782	;	1	1,941	135,415	2,803	530,314]	687,255
Limber pine	7,643	1,623	1	8,490	968	2,615	!	;	21,267
White fir	26,360	22,506	830	1,570	6,267	130,927	2,169	;	190,629
Engelmann spruce	21,615	3,461	859	1,091	8,655	13,852	176,125	!	225,658
Pinvon-juniper	2,796	28,095	:	1	1		1	6,177	37,068
Aspen	37,643	8,715	267	636	35,328	26,928	89,829	1	199,346
Cottonwood	!	11,825	1	!	!	1	452	!	12,277
Mixed hardwoods	-	74	-	-	1	-	1	-	74
All types	759,715	1,653,995	11,682	37,243	187,513	320,290	820,780	15,987	3,807,205

Table 20 (con.)

		0,	Species		
Forest type	Aspen	Cotton- wood	Other hardwoods	Total hardwoods	All species
	Thous	sand board	feet, Inter	Thousand board feet, International 1/4-inch rule	-inch rule
Douglas-fir	25,673	1	29	25,740	856,118
Ponderosa pine	702	2,173	366	3,241	1,603,188
Southwestern white pine	1	!	!	;	3,306
Spruce-subalpine fir	7,540	999	1	8,206	695,461
_imber pine	:	1	1	!	21,267
White fir	21,636	1	1	21,636	212,265
Engelmann spruce	17,112	;	ł	17,112	242,770
Pinyon-juniper	1	;	1	1	37,068
Aspen	241,356	1,512	1	242,868	442,214
Cottonwood	1	15,951	1	15,951	28,228
Mixed hardwoods	:		-		74
All types	314,019 20,302	20,302	433	334,754	334,754 4,141,959

Table 21.--Net annual growth of growing stock and sawtimber on State and private commercial timberland in New Mexico by ownership class and species, 1979

Ownership class Douglas-fire Ponderosa Southwestern with the pine Linker Subalpine White fire struct Engelment struct State 3,377 8,386 (1) 1,247 1,174 5,806 Fritate 3,377 8,386 (1) 1,247 1,174 5,806 Fritate 4,207 9,420 44 265 1,247 1,774 5,806 Fritate 17,942 2,874 1,39 43 2,676 2,230 2,766 2,230 2,766 2,530 2,766 <						Species			
Saminger	Ownership class	Douglas-f		onderosa pine	Southwestern white pine	Limber pine	Subalpine fir	White fir	Engelmann spruce
1,247 1,254 1,25		t F	1 1 1 1	1 1 1 1	1 1 1 1 1 1 1 1 1		1 1 1	1 1 1 1 1	ŀ
otal 4,207 9,420 44 281 1,344 1,899 6,278 1,342 2,874	State Private	230		636 8,784	(1) 44	16 265	97	125 1,774	392 5,886
e 17,942 2,874 139 47 5,99 2,230 2,230	Total	4,207		9,420	44	281	1,344	1,899	6,278
otal 15,942 2,874 19 613 5,551 6,888 otal 18,829 42,230 140 660 6,060 7,264 21 (con.) Species hip class proport Total Aspen Cottonwood hardwoods hardwoods juniper softwoods 220 1,794 220 2,794 220 1,794 220 1,794 220 1,794 220 1,794 220 1,794 220 1,795 220 1,794 220 1,795		1	1	1 1 1 1	1	SAWTIMBEF od feet, Internat	R Sional 1/4-inch r	1	1 1
18,829 42,230 140 660 6,060 7,264 21 (con.) Species Spec	State Private	<u></u>		2,874 39,356	139	47 613	509 5,551	376 6,888	2,230 27,626
Species Spec	Total	18,829		42,230	140	099	6,060	7,264	29,856
hip class pinyon/ Total Aspen Cottonwood hardwoods 200 1,794					Species				
GROWING STOCK	Ownership class	Pinyon/ juniper	Total	Aspen	Cottonwood	Other hardwoods	Total hardwoods	All species	
1,496 280 18 (1) -5 4,178 26,155 otal otal 1,496 23,473 4,243 220 -5 4,476 27,949 26,155 otal Thousand board feet, International 1/4-inch rule		1	1	9 9 1 3		f 1 1	1 1 1	1 1	
otal 23,473 4,243 238 -5 4,476 27,949 Thousand board feet, International 1/4-inch rule 98,115 12,057 580 -34 12,603 110,718 otal 105,039 12,598 641 -35 13,204 118,243	State Private	1 !	1,496 21,977	280	18 220	(1)	ല	1,794 26,155	
SAWTIMBER Thousand board feet, International 1/4-inch rule 6,924 541 61 -1 601 7,525 98,115 12,057 580 -34 12,603 110,718 otal 105,039 12,598 641 -35 13,204 118,243	Total	3	23,473	4,243	238	-5	4,476	27,949	
e 6,924 541 61 -1 601 98,115 12,057 580 -34 12,603 otal 105,039 12,598 641 -35 13,204		1	1 1 1 1	1	SAWTIMBER ard feet, Internat	tional 1/4-inch r	l I	i !	
105,039 12,598 64135 13,204	State Private	: :	6,924 98,115	541 12,057	61 580	-1	601 12,603	7,525 110,718	
	Total	9	105,039	12,598	641	-35	13,204	118,243	

Table 22.--Annual mortality of growing stock and sawtimber on State and private commercial timberland in New Mexico by ownership class, and softwoods

and hardwoods, 1979	6	
Species group and ownership class	Growing stock	Sawtimber
Softwoods:	Thousand -cubic feet-	Thousand -board feet ¹ -
State Private	135 1,435	497 5,466
Total	1,570	5,963
Hardwoods:		
State Private	10 284	18 640
Total	294	658
All owners	1,864	6,621

lnternational 1/4-inch rule.

Table 23.--Annual mortality of growing stock and sawtimber on State and private commercial timberland in New Mexico by cause of death and species, 1979

						Species					
Cause of death	Douglas-fir	Ponderosa pine	South- western white pine	Subalpine fir	White fir	Engelmann spruce	Total softwoods	Aspen	Other hardwoods	Total hardwoods	All species
	1	1 1	1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Th	GROWING STOCK - Thousand cubic feet	rock ic feet	1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1	1 1 1
Insects	;	25	;	28	23	83	159	59	;	59	218
Disease	;	17	;	;	69	1	86	69	;	69	155
Fire	22	202	1	;	99	;	325	1	!	1	325
Animal	;	;	;	;	!	;	;	1	;	;	;
Weather	ł	21	12	-	21	;	54	;	i	;	54
Suppression	;	11	;	;	;	;	11	;	;	;	11
Unknown	38	389	;	83	232	27	799	95	7	102	901
Logging	-	108	:	1	28	1	136	64	:	64	200
Total	95	773	12	111	439	140	1,570	287	7	294	1,864
	1 1 1 1 1	1 1 1 1 1 1	1 1	Thousand bo	ard fee	SAWTIMBER t, Internat	SAWTIMBER Thousand board feet, International 1/4-inch rule	inch rul	() ()	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1
Insects	;	135	;	137	96	403	771	;	;	;	771
Disease	1	98	;	;	256	;	342	102	!	102	444
Fire	105	897	;	;	291	;	1,293	i	1	ŀ	1,293
Animal	;	!	;	;	1	!	;	!	;	;	;
Weather	1	95	45	}	89	;	226	1	i	;	226
Suppression	;	!	;	;	1	ł	;	;	;	;	;
Unknown	72	1,907	;	192	746	298	3,215	517	39	556	3,771
Logging	1	1	:	1	116	:	116	:	:	:	116
Total	177	3,117	45	329	1,594	701	5,963	619	39	658	6,621

Felt, Dorothy G.; Sterrett, Velma J. Forest area and timber resource statistics for State and private lands in New Mexico, 1980. Resourc. Bull. INT-32. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station; 1983. 29 p.

Presents land area, commercial timberland area, timber inventory, and growth and mortality data based on Forest Survey standards.

KEYWORDS: forest surveys (regional), forest area classification, stand volume

The Intermountain Station, headquartered in Ogden, Utah, is one of eight regional experiment stations charged with providing scientific knowledge to help resource managers meet human needs and protect forest and range ecosystems.

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